

ROCKY FLATS CITIZENS ADVISORY BOARD

MINUTES OF WORK SESSION

March 6, 1997

FACILITATOR: Reed Hodgin, AlphaTRAC

Tom Marshall called the meeting to order at 6:10 p.m.

BOARD / EX-OFFICIO MEMBERS PRESENT: Alan Aluisi, Susan Barron, Tom Clark, Tom Davidson, Eugene DeMayo, Tom Gallegos, Paul Grogger, Victor Holm, Susan Johnson, Bob Kanick, Beverly Lyne, Tom Marshall, Linda Murakami, David Navarro / Jeremy Karpatkin, Frazer Lockhart, Tim Rehder, Steve Tarlton

BOARD / EX-OFFICIO MEMBERS ABSENT: Jan Burda, Mary Harlow, Sasa Jovic, Jim Kinsinger, Todd Saliman, Gary Thompson

PUBLIC / OBSERVERS PRESENT: Carol Barker (RF retiree); Kenneth Werth (citizen); Patrick Etchart (DOE); Jim Stone (RFCC); Kay Mack (RMPJC); Alice Gray (RMPJC); Don Dutcher (RF retiree); Jeanie Sedgely (RFLII); Jim Horan (citizen); Russell McCallister (RFFO); Mariane Anderson (DOE); Melinda Kassen (ICF Kaiser); Jerry Anderson (RMRS); Larry Helmerick (DOE); Alan Trenary (citizen); Sam Cole (PSR); Roman Kohler (retiree); Allen Schubert (K-H); Maggie Wood (citizen); Ravi Batra (DOE/RFFO); Ken Korkia (CAB staff); Erin Rogers (CAB staff); Deb Thompson (CAB staff)

CONVERSATION WITH DR. ALICE STEWART: Dr. Stewart was in town this week to meet with the Rocky Flats Health Advisory Panel, and also agreed to visit with the Board at its monthly meeting for an informal discussion of her views. She gave a brief description of her background and history. Dr. Stewart was trained as a physician in the United Kingdom prior to World War II. She attended Cambridge Medical School in the 1920s. She was invited to do surveys on health risks during World War II, and joined the first epidemiology department in Great Britain. Following the war, the world experienced an unprecedented increase in leukemia mortality, and an investigation was done of vital statistics, which determined that mortality rates were significantly higher for those over 60 and children under the age of 10. During the process of gathering this information, they discovered that there existed a risk of cancer for children whose mothers received x-rays during the early stages of pregnancy. This marked the first time that a link was found between cancer risk and low doses of radiation. Before this discovery, there had always

Date: April 3, 1997, 6 - 9:30 p.m.

Location: Westminster City Hall, lower-level Multi-Purpose Room, 4800 West 92nd Avenue, Westminster

Agenda: Presentation on historic preservation issues at Rocky Flats; discussion on privatization; review of MSC proposal and upcoming environmental assessment; recommendation on waste transportation

ACTION ITEM SUMMARY: ASSIGNED TO:

1. Revise and finalize environmental monitoring contract - Contract Work Group
2. Perform more research on Kaiser-Hill contract issues; return to Board with revised recommendation - Site Wide Issues Committee
3. Finalize and forward letter to Thomas Grumbly regarding new plutonium storage vault at Rocky Flats - Staff

MEETING ADJOURNED AT 10:00 P.M. *

(* Taped transcript of full meeting is available in CAB office.)

RESPECTFULLY SUBMITTED:

David Navarro, Secretary

Rocky Flats Citizens Advisory Board

The Rocky Flats Citizens Advisory Board is a community advisory group that reviews and provides recommendations on cleanup plans for Rocky Flats, a former nuclear weapons plant outside of Denver, Colorado.

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been the impression that receiving a certain low dose of radiation was perfectly safe. Her work on this project led her later to being asked to work on a study of workers at the Hanford site, where supposedly no problems seemed to exist. The researchers discovered effects for those receiving even low doses of radiation. CAB members and the public followed up with random questions for Dr. Stewart; her answers and comments are summarized below.

- The studies Dr. Stewart worked on were only on gamma radiation, x-rays or penetrating radiation, not on alpha particles that lodge in the body.
- An increase in child thyroid cancers was shown to exist following the accident at Chernobyl; many times following such an accident there are exaggerated rumors of problems and the same thing followed studies after the A-bomb. Epidemiological studies take time and patience is necessary.
- When talking about the likelihood of particles causing effects on humans, particle size is an issue. Particles emitted from Rocky Flats, for instance during the fires, are more likely to make their way into the sensitive part of the lung and may resurface later as cancer.
- Regarding the Soil Action Levels, Dr. Stewart stated she is pleased that parties admit there is a danger, but no one really knows at what level the danger starts. Those involved probably feel stating an absolute number is necessary, but more information would be required to study and know how to set those levels.
- Dr. Stewart feels an essential missing element when discussing risk is the risk of danger to workers, an acknowledgment of that risk, and some form of compensation for their having to take those risks. She does not believe it is acceptable to have an occupational risk without a level of compensation allowance.
- WIPP: it is not possible to keep radioactive material out of the food and water chain. Some studies have shown that even if radioactive materials are isolated, they make their way back into the food chain within 30 years.
- When studying Hanford workers, researchers looked at a population of 36,000 people, 30,000 men and 6,000 women. The study of those workers began in 1944 with a follow-up period through 1984. The workers were monitored by their badges and thus there was a known dose of radiation. Many variables existed in the analysis, but allowing for all those variables and given sufficient time, there showed evidence of a cancer risk even though none of those workers studied had ever received more than a permissible dose, and most received much less than permissible doses. They discovered the minimum period of time for latency is 15

years. Risk was minimal for those under 30 and maximum for those over 60; thus there is an exponential increase in risk with age.

- You can expect from radiation an increased risk of all types of naturally occurring cancers, which leads her to believe that naturally occurring radiation may be a leading cause of cancer anyway. Thus, Dr. Stewart believes there should never be an increase in levels of radiation to which citizens are exposed.
- Until enough studies are done, the health and safety regulations need to be exaggerated and err on the side of being overly cautious. Standards can always be relaxed later.
- Dr. Stewart suggested it may be worthwhile to inspect statistics in the Denver area of stillbirths, fibrous diseases, cancers, mortality rates, back to 1940; to do a demographic study and use every known cause of death and find out what is the regional distribution of known causes of death. This may shed some light on issues about risks from Rocky Flats.

PRESENTATION BY DON HANCOCK: Don Hancock, the director of the Nuclear Waste Safety Program at Southwest Research and Information Center in Albuquerque, spoke to the Board about the Waste Isolation Pilot Plant (WIPP) and transportation issues. Mr. Hancock believes the safety of the WIPP site is a major concern. Citizens in the area have looked at the issue of transportation for 20 years, since 1977. During early discussions of transportation issues surrounding WIPP, funding was given to Sandia to set up a Transportation Technology Center to research those issues. In 1989 the first draft Supplemental Environmental Impact Statement was prepared; it was then determined that many issues remained to be studied, such as training for doctors and emergency workers to be best prepared in the event of accidents. Don divides the system into three points: 1) basics, such as the highways being used, containers; 2) emergency response; and 3) workers. Previous WIPP studies have shown that rail transportation is the safer method of shipment rather than by truck, and a great deal of money was spent developing a rail system for WIPP. However, DOE has decided instead to use trucks as the primary mode of transportation to the site, and not escorted trucks, which would add an additional element of safety to truck shipment. Citizens in the area also have asked for more testing of the containers to be used in shipments, and would like to have the containers tested to the point of failure. Major issues remain among citizens and health care providers regarding emergency response issues not yet addressed to ensure the health and safety of everyone along the transportation routes and to ensure that health care providers receive the proper training to deal with possible accidents.

Q&A Session:

Question: Victor Holm: What are the minimum requirements you feel would make the transportation system acceptable to you?

Answer: Don Hancock: It's not up to me or DOE to decide what's acceptable, but rather those who are affected. But when there are uncertainties, we should err on the side of being overly cautious. That means DOE should be using the safest shipping method, including escorts, that the medical community be trained, and monitoring of shipment issues be more conservative.

Comment: Carol Barker: Nobody wants this waste. But we can still be listening to your comments 20 years from now and nothing will have happened. We need to get going, and we need to come up with some positive ideas; quit the negativity and let's get started.

Response: Don Hancock: What do you think the public reaction will be if in early shipments to WIPP, there is an accident? There would be extreme concerns about perception, a lot of concern about additional accidents, releases of radioactivity and the impact on those in the area. We're better off to be careful that we know what we're doing before we do it.

Question: Bob Kanick: In light of doubts about DOE's statistics on the number of accidents and their basis for proceeding, what institution could quantify the risk associated with this so that the public would believe it?

Answer: Don Hancock: DOE has gone to the public and said there aren't going to be accidents, releases, problems with the transportation system, and that's not credible to the public. Emergency response people, state, local, medical community, are going to be paid a lot more attention to than DOE.

Comment: Alan Trenary: There are going to be problems with transporting the waste, and we should look at the risk as being greater rather than assuming there's not going to be any risk. I'm worried that a lot of the effort to cleanup Rocky Flats is so they can open the buffer zone to development, and that is greedy and short-sighted. Rocky Flats shouldn't be used as a temporary storage area for waste coming from Hanford and other places. I support your position on these issues, and I appreciate your being here to discuss this with us.

Question: Kathleen Sullivan: At a WIPP hearing a few weeks ago, approximately 50 people testified and about 90% of those people opposed the opening of WIPP and mostly advocated onsite monitored retrievable storage at Rocky Flats. There are many people in the community that will support that as an option. The problem is that Rocky Flats has been so dependent on WIPP's opening that the condition of waste stored at the site is appalling. Also, can you summarize some of the problems of the WIPP facility itself?

Answer: Don Hancock: The facility needs to be projected to have releases of radioactivity low enough so there would be no more than 1,000 deaths in 10,000 years from radioactive releases. DOE still can't demonstrate that. They don't have good information on groundwater flow at the site; they haven't been able to figure out how to deal with the fact that the site is in the middle of one of the nation's leading oil and gas areas and the nation's only potash mining area. This facility is supposed to isolate waste for 1,000 years and is in an area where the integrity will be upset because of mining and drilling. Also, there are pathways in the geologic salt formations for water to come in, and for water, gas and radionuclides to escape horizontally.

Comment: Beverly Lyne: Last spring we had a Community Needs Assessment done around the Rocky Flats site, and people addressed a concern about sending the waste across the country and exposing others. And regarding a source for describing risk, one of the themes is that the closer to home, the more trust there is.

Question: Sam Cole: It seems as though WIPP is the only thing being offered to us. Why is that?

Answer: Don Hancock: In the first DOE EIS in 1980, the preferred alternative was to not do WIPP. That is no longer even a reasonable alternative now. It's about politics, and the political power of Westinghouse, the operating contractor since 1979, and the political support for the project for some people in Carlsbad as well as some members of the New Mexico congressional delegation. WIPP has cost \$2 billion and is not yet open. DOE's estimate is that it's a \$19 billion project. Waste repositories such as WIPP and Yucca Mountain have been chosen for political expediency, not because it's the best site.

Question: Victor Holm: We've had some difficulty getting data on past transportation accidents with nuclear materials. Do you know of any information we could get?

Answer: Don Hancock: Part of the reason is the kind of shipping campaigns we're talking about have not yet been done. There are a lot of low-level, uranium-type shipments, but I don't consider those to be equivalent to what we're talking about here. The other type of shipments are nuclear weapons and components. These are the kinds of shipments we should look at in terms of judging risk. If you want statistics, you have to determine first what you think is comparable to WIPP shipments. I don't think there is anything comparable and that's part of the problem.

Comment: Kenneth Werth: Rocky Flats tried to initiate a Ten Year Plan based on assumptions which mean nothing. Between WIPP and Yucca Mountain, I have heard there is already \$70 billion in litigation. The way our judicial system works, we won't have these issues solved within 50 years.

Response: Don Hancock: Our organization has been involved with some of the litigation, and we haven't spent that much and neither have the states of Texas or New Mexico, nor the government. As long as these sites have to meet regulatory scientific requirements, the lawsuits will continue, because the sites were picked for political reasons rather than technical ones.

Question: Jeremy Karpatkin: Let's assume that DOE had tried in 1980 to offer a different set of political assumptions, to take a gamble on monitored retrievable storage of the waste in its place, do you think DOE would have been more politically successful with that strategy?

Answer: Don Hancock: The reality is that people know if we're going to have facilities like Rocky Flats, Hanford, Los Alamos, they are waste sites. In one sense there isn't an alternative. DOE has to demonstrate to the public that it can safely handle the waste at its sites, and that will engender some significant amount of public confidence. But there are continuing examples of DOE not being forthcoming about accidents and releases at its sites, and that makes it hard to demonstrate that DOE can do the job well.

Comment: Ray Guyer: I would like to see WIPP open because I would like to see the material moved away from Rocky Flats and into a safer location. There is a potential for accidents on the highways, but you have to do something with it; you can't leave it here forever.

Response: Don Hancock: A lot of the waste at Rocky Flats does need to be repackaged first to be made safe. But even if a some of the waste at Rocky Flats were shipped to WIPP, the dangers at Rocky Flats would not be over. A lot of the waste still would remain at Rocky Flats.

PUBLIC COMMENT PERIOD:

Comment: Jim Stone: As an engineer with over 50 years experience, and over 35 as a professional engineer, I can tell you there never was a problem that didn't have constraints. When you design by those constraints and it gets shot down and you take another look at it, I have never seen a job yet that wasn't better after it was redone when the parameters were better defined and rationalized.

Comment: Hank Stovall: What is the cleanup standard in case of release, and what is the structure of collecting damages for the damaged properties or citizens?

Response: Don Hancock: No cleanup standard in case of accidents or contamination has been established. DOE says that if there is an accident with releases, which they don't think will happen, they would clean it up to the best of their ability based on what

happened. In terms of compensation, the WIPP shipments would be under the Price-Anderson Act, the federal government nuclear liability law, so compensation for accident victims would depend on the process at the time. You would need to have some level of proof that you were damaged. If you can prove damage or DOE agrees there is financial damage, in theory there should be money available from the federal treasury to pay for it.

Comment: Kenneth Werth: On these TRUPAC containers, are they going to be shipped and left down there, or will the containers be reused?

Response: Don Hancock: The TRUPAC is a transportation container only, not a disposal container, so fourteen 55-gallon drums are put in each at the site, shipped down to WIPP, taken out of the container, and the container is then sent back to the same place or another place to be reused.

Comment: Kathleen Sullivan: Regarding WIPP and Yucca Mountain, the crux of the philosophy behind both of these sites is, "out of sight, out of mind." If we go ahead with that kind of handling of the radioactive waste problem, we can hide the problem from us. If we look at the proper stewardship of these materials in a true monitored, retrievable format, then we can actually see the problem that we have created for ourselves. If we would continue to see the problem we are creating, it would become increasingly clear that the option of nuclear technology and continuing development of this technology is not a healthful one.

REVIEW AND APPROVAL OF ENVIRONMENTAL MONITORING

CONTRACT RESEARCH (Paul Grogger and Beverly Lyne): In response to its request for proposals issued in December 1996, CAB received a total of 21 proposals to review and analyze the environmental monitoring systems at Rocky Flats. The RFP Review Work Group reviewed those proposals. Monetary values submitted did not differ significantly, so the selection came down to how the companies proposed to do the work. The work group narrowed it down to four bidders, which were interviewed by phone since two of the finalists were out of town. The team of Parker-Hall, Inc. (PHI) was determined to have the most rounded experience, including a team of technical writers. A contract was developed with PHI and the Board approved the concept of what was contained in that contract. The principals working on the environmental monitoring project (Beverly Lyne, Ken Korkia and Tom Marshall) will be responsible for finalizing the contract, managing the project in conjunction with Dorothy Hall of PHI, and seeking consultation from the Executive Committee as needed during the course of the project.

Decision: *Approve environmental monitoring contract with some minor changes; and authorize the principals working on environmental monitoring project to finalize the contract and manage the project, seeking consultation when necessary from the Executive Committee. APPROVED BY CONSENSUS.*

RECOMMENDATION ON KAISER-HILL CONTRACT ISSUES (Susan Johnson):

The Site Wide Issues Committee had drafted a recommendation for the Board's review and approval regarding assessing and monitoring the performance based contract at Rocky Flats. However, since turning in the draft recommendation, several issues had come up and the committee recognized that some changes may need to be made to the recommendation, following some research and information gathering by the committee. Board members were asked to submit to the committee any comments on the draft recommendation as it is now. The committee will return to CAB with a revised recommendation in April.

BRIEFING ON UPCOMING TEN YEAR PLAN REVIEW ACTIVITIES (Tom Marshall):

The Budget Subcommittee, as a part of its budget review, discovered that it would also need to address issues in the Ten Year Plan. CAB was asked to give input on how to handle review of the Ten Year Plan and the FY 99 budget for Rocky Flats. A draft timeline was prepared for CAB members to review. DOE-HQ has decided not to release the Ten Year Plan for public comment until March 31, which leaves approximately 45 days for public comment. DOE-RFFO is willing to work with the Board to provide in whatever form necessary information and background on what is contained in the Ten Year Plan, but is prohibited from actually releasing the document at this time. The Site Wide Issues Committee will be responsible for reviewing Ten Year Plan issues. The Budget Subcommittee will focus on specific budget issues.

LETTER TO DOE REGARDING THE PLUTONIUM STORAGE VAULT (Tom Marshall):

The Plutonium and Special Nuclear Materials Committee drafted a letter for CAB's review and approval. The letter is addressed to Tom Grumbly asking him to reconsider the determination not to build a new plutonium storage vault at Rocky Flats. In winter 1995, CAB issued a recommendation endorsing the building of a plutonium storage vault because of concerns regarding the safety of Building 371, its possible lack of safety during seismic events and its ability to withstand terrorist attacks. A new vault would be safer and would pay for itself in 10 years. DOE decided it wants to cancel substantive work on the new plutonium vault including the EIS, with the exception of some conceptual design work. DOE believes plutonium will be moved to the Savannah River Site or Pantex Facility soon, based on assumptions in the Surplus Fissile Materials Storage and Disposition PEIS. The letter states that CAB does not believe the plutonium will move in the near future as there are problems with issues surrounding transportation of plutonium and citizen concerns, and that safe storage at Rocky Flats should be what guides plutonium decisions and work should continue on the vault.

Decision: Approve the letter to Tom Grumbly. APPROVED BY CONSENSUS.

NEXT MEETING: